

the mechanistic and the teleological, which continues to be of the first importance.

Brief consideration of one last question may complete this excursion. Is all explanation causal ? The answer is both yes and no. It is a matter again of stricter or looser usage of language. Imagine an inquirer from another world of mental powers like our own, but quite ignorant of our science. Being fascinated by the activities of humans, he makes the following experiment: he suddenly and unexpectedly jabs a pin into one human after another until the experiment has been repeated on each of one thousand specimens. It so happens that in all his thousand experiments, he has never struck upon an anaesthetic patch of skin, and every one of his thousand victims has responded instantly with a violent start or jump. The experimenter formulates an inductive generalization: Every human when suddenly pricked responds with a jump. And he is in a position to predict with considerable confidence that human 1001 will also respond in similar fashion, will conform to the empirical law of jumps. And, if he then meets a fellow-experimenter who has made the experiment on only a few humans, and who is puzzled by this interesting phenomenon, he 'explains' it to him by saying, 'Yes, you'll find that they all do it; they evidently are all made that way. But if the visiting experimenters are endowed with lively curiosity, they will not find this 'explanation' finally satisfying. If they can get into

conversation with some of their victims, they
may obtain
further light on the phenomenon. One of them
offers a
mechanical explanation by expounding the
anatomy and
physiology of muscle and nerve and the theory
of reflex
action. Another tells them that the pin-prick
is painful,